

DOCUMENT RESUME

ED 128 527

95

UD 016 301

AUTHOR Politzer, Robert L., Hoover, Mary Rhodes
TITLE Teachers' and Pupils' Attitudes Toward Black English Speech Varieties and Black Pupils' Achievement. Research and Development Memorandum No. 145.
INSTITUTION Stanford Univ., Calif. Stanford Center for Research and Development in Teaching.
SPONS AGENCY National Inst. of Education (DHEW), Washington, D. C.
REPORT NO SCRDT-RDM-145
PUB DATE Jun 76
CONTRACT NE-C-74-0049
NOTE 62p.

EDRS PRICE MF-\$0.83 HC-\$3.50 Plus Postage.
DESCRIPTORS Achievement Gains; *Changing Attitudes; Elementary Education; Ethnic Groups; Grade 4; Grade 5; Grade 6; Language Patterns; Language Role; Language Skills; Language Styles; Language Usage; *Language Variation; Minority Group Children; Negro Achievement; *Negro Attitudes; *Negro Dialects; Negro Education; Nonstandard Dialects; *Performance Factors; Reading Achievement; Student Attitudes; *Teacher Attitudes

ABSTRACT

The main purpose of this study is to measure the attitudes of teachers toward speech varieties used by speakers of Black English and to determine whether there is any evidence that those attitudes are linked to pupils' classroom performance in reading. Also investigating is whether exposure to information about and experience with varieties of Black English will bring about a change in the attitudes of teachers, and whether teachers tend to transmit their own attitudes to pupils. The research was conducted in grades 4-6 in three sites with a total of 456 pupils and 37 teachers. Among the main conclusions of the study are the following: (1) that teachers and pupils tend to agree in their attitudes toward black speech varieties on certain crucial attitude dimensions, such as the greater likelihood of the Standard Black English (SBE) speaker's success in school; (2) that exposure to new information appears to have no significant effect on apparently well-established attitudinal characteristics; (3) that teacher attitudes have little documentable effect on actual reading gains made by the pupil, but appear to have some relation to the grades assigned by the teachers. It is concluded that teacher attitudes do have an impact on pupils--on their achievement and perhaps most directly on their attitudes--but the nature of the impact is influenced by many factors. (Author/AH)

ED128527

Stanford Center for Research and Development in Teaching
School of Education, Stanford University
Stanford, California

Research and Development Memorandum No. 145

TEACHERS' AND PUPILS' ATTITUDES
TOWARD BLACK ENGLISH SPEECH VARIETIES
AND BLACK PUPILS' ACHIEVEMENT

Robert L. Politzer and Mary Rhodes Hoover

June 1976

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

UD 016301

Published by the Stanford Center for Research and Development in Teaching, supported in part as a research and development center by funds from the National Institute of Education, U. S. Department of Health, Education, and Welfare. The opinions expressed in this publication do not necessarily reflect the position, policy, or endorsement of the National Institute of Education. (Contract No. NIE-C-74-0049.)

Introductory Statement

The mission of the Stanford Center for Research and Development in Teaching is to improve teaching in American schools. Current major operations include three research and development programs--Teaching Effectiveness, The Environment for Teaching, and Teaching and Linguistic Pluralism--and two programs combining research and technical assistance, the Stanford Urban/Rural Leadership Training Institute and the Hoover/Stanford Teacher Corps Project. The ERIC Clearinghouse on Information Resources is also a part of the Center. A program of exploratory and related studies provides for smaller studies not part of the major programs.

This report is part of the work of the Program on Teaching and Linguistic Pluralism.

Acknowledgments

The authors wish to express their gratitude to all those whose help and cooperation made this study possible. A special note of thanks goes to the project's research assistants, data collectors Dwight Brown and Shirley Lewis; and data coders Shirley Hicks, Darlene Williams, and James Ford.

Also directly involved in the study were the following teachers: John Jacobs, Eugene King, Eph Cannon, Sal Corelli, and Cynthia Cooksey, Sherry Ernst, Mary Orrison, Ruth Wilturner, Minnie Cooper, Ladessa Gardner, Margaret Williams, Pauline Breslin, Ethel Johnson, Ann Ebow, Barbara Glover, and Audrey McKiver of the Ravenswood (California) City School District; Susan Pearch, Hermaline Rudd, Carol Smith, Theresa Petrosky, Judith Levy, Pauline Hensley, Frieda Miller, Geraldine Nooks, Mabel Retz, Lelah Neibel, and Russel Maurice of the Dayton, Ohio, Elementary Schools; and Rosa Adamson, Carol Buschel, Paula Davis, Margaret Dickson, Beatrice Drew, Laura Heifferman, Ann Hildebrand, Lucille Hoberman, Peggy Morris, Betty Slass, Naomi Watkins, and Richard Carman of PS 100, New York, New York.

We also wish to thank the typists and assistants for the project: typists Andrea Richardson, Maribel Quesada, and Lois Middleton; assistants Warnell Coats and Laura Saltzman; and artist Bill Dallas. The administrators of the schools involved, who were of great assistance, are Warren C. Hayman, Omowale Satterwhite, Virginia Moulden, and Othene Thomas of the Ravenswood City School District; Edythe Ford of the New York City Public Schools (PS 100); and Mildred Patterson, Margaret Hughes, and Fred Stroud of the Dayton, Ohio, Elementary Schools.

R. L. P.

M. R. H.

Abstract

The purposes of this study were (1) to determine teachers' and pupils' attitudes toward three varieties of Black English, (2) to investigate whether exposure to information about and experience with varieties of Black English would bring about a change in the attitudes of teachers, (3) to investigate whether teacher or pupil attitudes toward Black English had any influence on pupils' achievement in reading, and (4) to determine whether teachers tended to transmit their own attitudes to pupils. The research was conducted in grades 4-6 in three sites with a total of 456 pupils and 37 teachers.

A matched guise instrument was used to measure attitudes. Teachers and pupils were asked to react to the voices of four speakers speaking three guises (speech varieties). The attitudinal dimensions on which reactions were elicited on Likert-type scales were likelihood of achievement in school, preference, standardness, acceptability in different social environments, and (for teachers only) degree of education of speaker. Attitudes were assessed by measuring difference between reactions to different guises used by the same speaker and by using the difference in reactions to Guises I (Standard Black English, or SBE) and III (heavily marked Vernacular Black English, VBE) as an indicator of the degree of upgrading of SBE over VBE.

Pupil achievement was measured by (1) a relative reading gains score (the difference between the pupil's actual 1975 score on a standardized test and a predicted score based on 1974 scores), (2) grades in reading, and (3) performance on two SCRDT Student Black English Tests (Discrimination and Production).

T-tests were used to establish the significance of differences in the evaluation of the guises. Correlation analyses were performed on teacher attitude difference scores and class achievement scores; pupil attitude difference scores and achievement scores; and teacher attitude difference scores and class attitude difference scores. While there were some differences among sites as well as between pupils and teachers, there was general agreement on the greater likelihood of success in school by the SBE speaker. Workshops on speech varieties produced no significant change in teachers' attitudes. Teachers' differential attitudes toward SBE and VBE influenced (i.e., were significantly and positively correlated with) pupils' test scores only on the test of ability to perceive a difference between SBE and VBE. Pupils' attitudes were positively related to their ability to distinguish between SBE and VBE and, in one of the research sites, to their ability to produce Standard English and their grades in reading. Teachers' attitudes concerning the potential for educational achievement by speakers of SBE and VBE influenced their pupils' responses on most of the attitudinal dimensions measured; however, perhaps for reasons related to the entire school environment, pupils were influenced in the direction of teacher attitude in one research site, and in the direction opposite to teacher attitude in another.

Contents

List of Tables	vii
Introduction	1
Purposes	1
Varieties of Black English	2
Data Collection	3
Ravenswood	3
Harlem	4
Dayton	4
Variables	4
Attitudes	5
Treatment	7
Pupil Achievement	8
Teacher Attitudes	10
Pupil Attitudes	14
Teacher Attitudes and Pupil Achievement	23
Ravenswood	23
Harlem	24
Pupil Attitudes and Pupil Achievement	28
Ravenswood	28
Harlem	30
Teacher Attitudes and Pupil Attitudes	32
Conclusions	32
References	37
Appendices	
A. Sample Scripts for Speech Varieties Attitude Test . .	39
B. Response Sheets for Speech Varieties Attitude Test .	40
C. Regression of 1975 Reading Scores Over 1974 Reading Scores	44
D. Mean Pupil Achievement Scores by Grade Level and Sex	45
E. Summary of Results of t-Tests for Significant Differences between Guises (Teachers' Attitudes) . .	47
F. Summary of Results of t-Tests for Significant Differences between Guises (Pupils' Attitudes) . . .	50

Appendices

G.	Summary of One-Way Analysis of Variance for Significant Independent Variables Affecting Pupils' Attitude Difference Scores	51
H.	Summary of One-Way Analysis of Variance for Significant Independent Variables Affecting Pupils' Achievement Measures	53

Tables

1. Means and Standard Deviations of Teachers' Speech Varieties Attitude Judgments: Ravenswood	11
2. Means and Standard Deviations of Teachers' Speech Varieties Attitude Judgments: Harlem	12
3. Means and Standard Deviations of Teachers' Speech Varieties Attitude Judgments: Dayton	13
4. Mean Attitude Difference Scores (Guise I - Guise III) by School, Sex, and Ethnicity, for All Teachers Based on Attitude Pretests	15
5. Means and Standard Deviations of Pupils' Speech Varieties Attitude Judgments	17
6. Mean Pupil Attitude Difference Scores (Guise I - Guise III) by Grade Level and Sex	19
7. Teacher Attitude Difference Scores and Mean Pupil Achievement Scores: Ravenswood	25
8. Correlations between Teacher Attitude Difference Scores and Mean Pupil Achievement Scores: Ravenswood	26
9. Teacher Attitude Difference Scores and Mean Pupil Achievement Scores: Harlem	27
10. Correlations between Teacher Attitude Difference Scores and Mean Pupil Achievement Scores: Harlem	28
11. Means and Standard Deviations of Pupil Attitude Difference Scores and Achievement Measures: Ravenswood . . .	29
12. Correlation of Pupil Attitude Difference Scores and Achievement Measures: Ravenswood	29
13. Means and Standard Deviations of Pupil Attitude Difference Scores and Achievement Measures: Harlem	31
14. Correlation of Individual Pupil Attitude Difference Scores and Achievement Measures: Harlem	31
15. Teacher Attitude Difference Scores on Achievement and Mean Pupil Attitude Difference Scores on All Dimensions . . .	33
16. Correlations between Teacher Attitude Difference Scores and Mean Pupil Attitude Difference Scores	34
17. Correlations between Teacher Attitude Difference Scores on Achievement and Mean Pupil Attitude Difference Scores, by Ethnicity of Teachers	35

TEACHERS' AND PUPILS' ATTITUDES TOWARD BLACK ENGLISH SPEECH
VARIETIES AND BLACK PUPILS' ACHIEVEMENT

Robert L. Politzer and Mary Rhodes Hoover

Introduction

The study of attitudes concerning language has recently become an extremely popular subject of sociolinguistic and psycholinguistic inquiry (see, e.g., Shuy & Fasold, 1973). Much of the inquiry has centered on teachers' negative attitudes toward "nonstandard" speech and the importance of these attitudes in the educational process. Thus, Wolfram and Fasold state in a recent textbook on sociolinguistics that their "experience in working with teachers has indicated that the most crucial contribution that this study of social dialects can make to education is in the area of teacher attitudes" (Wolfram & Fasold, 1974, p. 178). Seligman, Tucker, and Lambert (1972) have documented the impact of pupils' speech styles on teachers' attitudes. The importance attached to teacher attitude lies, of course, in a belief in the so-called Pygmalion effect (Rosenthal & Jacobsen, 1968; Dusek, 1975), which results in lower achievement on the part of pupils whose speech style is associated with low achievement in the minds of their teachers.

Purposes

The main purpose of this study was to attempt to measure the attitudes of teachers toward speech varieties used by speakers of Black English and to determine whether there is any evidence that those attitudes are linked to pupils' classroom performance in reading.

We also wished to examine pupils' attitudes, which have received relatively little attention. This study therefore investigated whether the instruments used for measuring teachers' attitudes could be used to measure pupils' attitudes, and whether pupils' attitudes toward language have any influence on their achievement and performance in school. The rationale for investigating the relation between attitude

and achievement is based on the link between language attitudes and self-concept, which in turn is widely assumed to have effects on achievement. A pupil having negative attitudes toward a language variety that is identified or closely associated with his or her ethnic background may be assumed to harbor negative self-concepts.

The aims of the study can be summarized as follows:

1. To determine attitudes toward varieties of Black English held by teachers and their pupils.
2. To investigate whether exposure to information about language variety, through workshops and pupil tests, would bring about a change in teacher attitudes.
3. To investigate whether teacher and/or pupil attitudes toward Black English speech varieties have any influence on pupils' achievement in reading.
4. To investigate whether teachers tend to transmit their own attitudes to their pupils.

Varieties of Black English

The speech varieties examined were three types of Black English. Speech Variety I is called Standard Black English (SBE). In general, SBE is distinguished by its similarity to standard English grammar and its simultaneous use of varying degrees of phonological, intonational, and lexical features of "vernacular"¹ Black English (Taylor, 1971). Speech varieties II and III are two varieties of Vernacular Black English (VBE). Both are characterized by traditional Black English phonology and grammar (Bantley & Politzer, 1972; Federal City College, 1975), intonation (Vaughn-Cooke, 1972), and vocabulary (Dalby, 1972). Variety II is distinguished by the absence of a specially marked form for the third person singular (have, do, get, rather than has, does, gets). Variety III is distinguished by multiple negation and inverted negatives ("don't nobody wanna do all that") as well as the unmarked third person singular. See Appendix A for an illustration of how the same information can be expressed in each of the three speech varieties.

¹The term "vernacular" is used instead of "nonstandard," since for nonlinguists "nonstandard" may have a pejorative connotation.

The following table illustrates the linguistic relationship of so-called Standard English (SE)² and Standard Black English to Vernacular Black English.

	Phonology	Grammar	Vocabulary	Intonation
SBE	~	-	~	~
SE	-	-	-	-

Key: - Different from VBE

~ Uses VBE in varying degrees according to situation and circumstance

Data Collection

The study was carried out in three research sites: Ravenswood (California) City School District (hereafter referred to as "Ravenswood"); Harlem, New York City; and Dayton, Ohio. Not all measures were used in all three sites and not all data from other sources became available at each of the sites. No pupil data from Dayton are reported. And, for several subjects included in the study, some of the data were missing. Therefore, some of the N's in Tables 1 through 17 are smaller than those cited below. All pupils participating were Black. Twenty of the 37 teachers were Black; 16 were white. The ethnicity of one teacher was not reported. In brief, the research sites, the subjects, and the types of data collected were as follows.

Ravenswood

Teachers: 13 (Black, 8; white, 5; male, 4; female, 9)

Pupils: 336 (male, 164; female, 153; sex not reported, 19)

Grades: fourth, 39; fifth, 185; sixth, 105; grade not reported, 7

Data Obtained:

- Teacher attitude scores on Speech Varieties Attitude Test (pretest and posttest)

² Fasold (1972) defines Standard English as English characterized by the use of standard grammar and the absence of any strong regional or social marker that might be considered unacceptable or objectionable by those in positions of power.

- . Pupil attitude scores on Speech Varieties Attitude Test
- . Discrimination Test scores
- . Production Test scores (three to four pupils from each teacher's class)
- . Relative Gain Scores in Reading
- . Grades in reading

Harlem

Teachers: 12 (Black, 7; white, 5; male, 1; female, 11)

Pupils: 120 (male, 60; female, 60)

Grades: fourth, 82; fifth, 38

Data Obtained:

- . Teacher attitude scores on Speech Varieties Attitude Test (pretest and posttest)
- . Pupil attitude scores on Speech Varieties Attitude Test
- . Discrimination Test scores
- . Production Test scores (three to four pupils from each teacher's class)
- . Relative Gain Scores in Reading (fourth grade only)
- . Grades in reading

Dayton

Teachers: 12 (Black, 5; white, 6; not reported, 1; male, 1; female, 11)

Pupils: (data not reported)

Data Obtained:

- . Teacher attitude scores on Speech Varieties Attitude Test (pretest and posttest)

The various tests and measures mentioned above are described in detail under "Variables," below.

Variables

The variables to which the main goals of this study refer are the following: (1) teachers' and pupils' attitudes toward speech varieties; (2) workshops and the use of student Black English tests, which served as a treatment designed to change teachers' attitudes; and (3) pupil achievement measures.

Attitudes

Except for minor differences noted below, the attitude measures used for teachers and pupils were identical. The instrument used was the SCRDT Black English Speech Varieties Attitude Test (Program on Teaching and Linguistic Pluralism, SCRDT, forthcoming). This instrument is a matched guise test. The subjects reacted to three varieties or guises of Black English presented on audiotape by four speakers (in this case two men and two women). Thus a total of 12 sets of responses were obtained from each subject. Four one-paragraph stories were recorded. Each speaker recorded one of the stories three times, altering the grammatical and/or phonological features each time to produce a different guise: for example, "Nobody wants to do all that" (Guise I); "Nobody wanna do all that" (Guise II); "Don't nobody wanna do all that" (Guise III). The rationale behind the matched guise approach is that the subjects taking the test are not aware of reacting to the same speakers (see Lambert, Frankel, & Tucker, 1966), and that their differential reactions can therefore be interpreted as an indication of their attitudes toward the speech varieties rather than toward the voices of individual speakers.

The teachers' attitudes were measured during two workshops in which the teachers were introduced to concepts of speech variation and the appropriateness of different speech styles in different situations. They were tested once at the beginning of the first workshop and once during the second.

Pupils' attitudes were measured only once, during the interval between the workshops. The tests were administered by the teachers during regular class sessions.

All subjects were asked to react to each speech sample on four dimensions of attitude.

1. Likelihood of achievement in school
2. Preference
3. Standardness
4. Acceptability of the speech variety in various social settings

In addition, the teachers were asked to assess the degree of education of the speaker. This attitudinal dimension was not included on the pupil test. Instead the pupils were asked to react to a second acceptability measure, one that required them to choose among four possible labels--"street," "playground," "church," and "school" talk--for each voice.

The responses were measured on a Likert-type scale. For example, on the achievement dimension, the pupils were asked,

A person who speaks like this is (choose one): At the top of his class__ Near the top of his class__ Near the bottom of his class__ At the bottom of his class__

And the teachers were asked,

The speaker is a (choose one): Very good achiever__ Slightly good achiever__ Slightly poor achiever__ Very poor achiever__

The response sheets, used for every voice in every guise, are shown in Appendix B. Responses to all attitudinal dimensions, except the acceptability rating shared by the teachers' and pupils' tests, were scored from 1 (low) to 4 (high). The shared acceptability rating, referred to in the tables as acceptability or Acceptability¹, was measured on a scale from 1 to 8; the highest rating was assigned to acceptability in the most formal setting (school environment) and the lowest to total rejection of the speech variety in any setting.

Subjects' total scores for each guise on each attitudinal dimension were computed by adding the scores they had assigned to all four speakers. Except for the acceptability measure shared by the teachers' and pupils' tests, an individual subject's score on each dimension could range from 4 to 16. In the acceptability dimension, which was scored on an 8-point scale, individual scores could range from 4 to 32.

For both teachers and pupils the maximum differential reaction due to guise was seen to be between Guises I (high) and III (low). In order to assess the degree of this preference for Guise I over Guise III, so-called attitude difference scores for each attitudinal dimension

were computed for each subject. Since some subjects did not respond to all four speech samples of each guise, individual subjects' mean scores rather than their total scores were used. In other words, the highest mean score that could be assigned to a particular guise by any subject was 4 (if each of the voices presenting the guise were rated 4) for all of the dimensions that were measured on a 4-point scale; the lowest possible mean score was 1. On the 8-point acceptability measure, individual subjects' mean scores for each guise could of course range from 1 to 8. Attitude difference scores computed on this basis could thus range from ± 3 (4-1, 1-4) to 0 on the 4-point scale measures and from ± 7 (8-1, 1-8) to 0 on the 8-point acceptability measure. Of course, most of the individual attitude difference scores were positive. The magnitude of the positive scores indicated how much higher Guise I was rated relative to Guise III.

Treatment

Two workshops were held in each research site. In them the teachers were introduced to the SCRDT Teacher and Student Black English Tests (Program on Teaching and Linguistic Pluralism, SCRDT, forthcoming) and were given explanations about the tests, the characteristics of Black English, and speech variation in general. The topics covered in the workshops dealt with the history of Black English, the distinction between standard and vernacular varieties of Black English, and the appropriateness of different speech varieties for different social situations. A particular point stressed in the workshops was that Vernacular Black English is a systematic, legitimate language system.

At the beginning of the first workshop the attitude measure (Speech Varieties Attitude Test) was administered to the teachers. Between sessions, the teachers were asked to administer the attitude test and one of the SCRDT Student Black English Tests (Discrimination) to all of their Black pupils and another of the Student Black English Tests (Production) to four specially selected Black pupils in their classes (two pupils whom they judged highly proficient in Standard Black English and two whom they judged highly proficient in Vernacular Black English).

The second workshop was held approximately two weeks after the first for the purpose of readministering the Speech Varieties Attitude Test to the teachers. The test was readministered in order to determine whether the first workshop and the use of the student tests had produced a change in the teachers' attitudes.

Pupil Achievement

Relative gain scores in reading. Pupil achievement was measured at only two of our three research sites. The most important measure used in the attempt to establish a possible relation between teacher attitude and pupil achievement was a relative gain score in reading. This measure consisted of the difference between a pupil's score on an objective reading test administered at the end of the school year 1975 and a predicted score. The predicted score was the one the pupil would have obtained if his score had been on the line of regression of the 1975 scores over the 1974 scores. (For the regression analysis on which the predicted reading scores were based, see Appendix C.) The relative gain scores were chosen as a measure of pupil achievement because significant differences between class means on these scores can be interpreted as being caused by differences in instruction during the period between tests. In interpreting the relative gain scores, we must also keep in mind that the average relative gain of the entire population for which the scores have been established is, of course, zero, and that negative or positive relative gains refer only to relative distances from the line of regression and not to actual gains made by the pupils. In other words, a negative gain score indicates less than average gain but not necessarily absence of gain.

For the Ravenswood sample, the standardized scores of the reading section of the Comprehensive Test of Basic Skills administered in 1974 and 1975 were used. (The use of the standardized scores allowed comparison of gains made at different grade levels.) In Harlem, reading scores allowing a regression of 1975 over 1974 scores could be obtained only for fourth graders (thus the Harlem fifth graders are not included in the analysis of reading gains). The 1975 scores were based

on an objective reading test used in New York City schools, and the 1974 scores consisted of an achievement grouping of pupils according to a scale based on the Lippincott reader test used by the school.

The Discrimination Test. This 30-item test which is one part of the SCRDT Student Black English Tests, consists of 15 sentences in Standard Black English and 15 corresponding sentences marked by Vernacular Black English features. The test was administered to the entire class by audiotape and the pupils were asked to indicate on an answer sheet whether the tape-recorded sentences they heard were "school program talk" (SBE) or "playground talk" (VBE). For the samples used in this study, the test had a reliability of Cronbach $\alpha = 0.77$. The teachers participating in the study administered the test to all of their Black pupils after the first workshop.

The Production Test. This oral test, also part of the SCRDT Student Black English Tests, consists of SBE and VBE sections of 15 items each. Language was elicited from the student with the help of a picture and a question about the picture. In the SBE section, questions were in SBE; in the VBE section, questions were strongly marked by VBE forms. Only answers in SBE were regarded as correct on the SBE version of the test, and only answers marked by VBE features were considered correct on the VBE part of the test. For the subjects used in this study, the SBE section had a reliability of Cronbach $\alpha = 0.79$, while the VBE section reliability was Cronbach $\alpha = 0.75$. The teachers participating in the study administered the test to three or four of their pupils after the first workshop.

Pupil grades. For the purpose of measuring a general effect of teacher attitudes on achievement as judged by individual teachers, the pupils' grades in reading assigned by teachers at the end of the school year (spring 1975) were used as a criterion variable. They were scaled from 1 (failure) to 4 (A). Mean pupil achievement scores on all measures are shown in Appendix D.

Teacher Attitudes

The mean scores assigned by teachers to each guise on each dimension, both before and after the treatment, are shown in Tables 1 - 3. Significant differences between means on each attitude dimension are indicated by vertical single ($p < .05$) or double lines ($p < .01$) connecting the mean scores. Some data are missing because several teachers did not indicate reactions to some guises; all data from these teachers were excluded from these tables.

With only one exception--namely standardness judgments on the post-workshop tests in Ravenswood and Harlem--there were no significant differences in evaluative judgments concerning the Guises II and III, though the pattern of rating III a little lower than II is fairly general. The fact that the significant differences between II and III appear in posttest but not pretest standardness judgments seems to indicate that the workshop resulted in some increase in linguistic sophistication or awareness on the part of the teachers: i.e., Guise III is different from and less "standard" than Guise II.

Another general observation concerns the "preference" ratings. While Guise I is rated somewhat higher than the others, there was only one significant difference in preference ratings. On a dimension of "general liking," the teachers as a group did not indicate any strong difference among the guises. The only significant difference in preference rating appears in the posttest in Dayton. It seems to be an unexpected result of the workshop. Just why the workshop should be associated with a relative "appreciation" of SBE over the vernacular guises is difficult to explain. Perhaps having the workshops conducted by a speaker of Standard Black English was a more powerful "treatment" than the materials presented in the workshop itself.

The overall pattern of ratings in all dimensions except preference and all test administrations is obviously I over II and III. There are a few exceptions to this pattern: Harlem, pretest, degree of education, I over II but not over III; and Dayton, pretest, degree of education, I over III but not over II. The posttests show in general the same patterns

TABLE 1
Means and Standard Deviations of Teachers' Speech Varieties Attitude Judgments: Ravenswood
(N = 7)

	Pretest					
	Education Mean S.D.	Acceptability Mean S.D.	Achievement Mean S.D.	Preference Mean S.D.	Standardness Mean S.D.	
Guise I	13.71 4.35	22.57 11.07	12.14 5.59	13.71 0.95	13.29 3.45	
Guise II	10.00 3.39	17.43 10.23	8.71 4.92	13.14 1.07	8.85 3.67	
Guise III	8.42 2.94	15.71 10.52	7.57 5.22	12.00 1.92	7.71 3.40	
	Posttest					
	Education Mean S.D.	Acceptability Mean S.D.	Achievement Mean S.D.	Preference Mean S.D.	Standardness Mean S.D.	
Guise I	10.14 7.15	21.28 14.75	11.00 7.05	9.43 6.60	11.14 7.63	
Guise II	8.57 6.19	16.14 11.64	6.00 5.29	8.28 5.68	7.14 5.23	
Guise III	6.42 4.58	14.43 11.15	5.29 5.35	8.28 5.68	6.28 4.68	

For Tables 1 - 3:

Difference between means = $p < .05$ is indicated by a single line.

Difference between means = $p < .01$ is indicated by a double line.

For summary of t-tests for significant differences between means, see Appendix E.

TABLE 2
Means and Standard Deviations of Teachers' Speech Varieties Attitude Judgments: Harlem
(N = 8)

	Pretest					
	Education Mean S.D.	Acceptability Mean S.D.	Achievement Mean S.D.	Preference Mean S.D.	Standardness Mean S.D.	
Guise I	12.75 4.50	22.13 7.99	14.13 4.23	15.50 0.76	15.75 0.46	
Guise II	8.50 4.04	15.38 9.37	11.38 5.50	13.63 2.97	10.38 2.83	
Guise III	9.00 4.69	13.50 7.56	10.50 5.37	13.37 3.46	9.88 2.88	
	Posttest					
	Education Mean S.D.	Acceptability Mean S.D.	Achievement Mean S.D.	Preference Mean S.D.	Standardness Mean S.D.	
Guise I	12.75 4.37	26.75 3.24	13.63 5.55	14.25 0.65	14.00 1.69	
Guise II	9.13 4.52	19.88 8.20	10.88 4.94	12.63 2.83	9.88 1.81	
Guise III	8.75 5.12	19.25 8.01	10.00 5.13	12.37 3.25	8.13 0.99	

TABLE 3
Means and Standard Deviations of Teachers' Speech Varieties Attitude Judgments: Dayton
(N = 11)

	Pretest					
	Education Mean S.D.	Acceptability Mean S.D.	Achievement Mean S.D.	Preference Mean S.D.	Standardness Mean S.D.	
Guise I	12.45 3.21	22.82 6.48	10.36 6.01	12.00 3.26	12.82 3.60	
Guise II	9.45 2.84	14.27 8.21	8.18 4.19	10.73 1.74	9.36 3.44	
Guise III	8.64 2.80	13.81 10.32	7.18 3.68	11.00 1.84	9.09 2.74	
	Posttest					
	Education Mean S.D.	Acceptability Mean S.D.	Achievement Mean S.D.	Preference Mean S.D.	Standardness Mean S.D.	
Guise I	12.82 4.64	25.96 9.44	8.82 7.24	12.09 4.72	12.91 4.95	
Guise II	7.91 3.56	14.18 10.33	6.09 4.89	9.36 4.13	8.45 3.99	
Guise III	7.45 3.42	13.36 9.63	5.36 4.48	9.82 4.19	8.09 4.13	

of evaluation of guises as the pretests. On the dimension that is perhaps the most relevant in the school context, namely likelihood to achieve in school, pre- and posttest patterns are definitely identical and are the same in all three research sites: Standard Black English is definitely associated with a higher achievement potential than either of the vernacular varieties.

In order to compare the attitudes of teachers, the attitude difference scores of individual teachers were computed and analyzed according to school site, sex, and teacher ethnicity. It will be recalled that an individual difference score is the mean score (average of scores on the four speakers) assigned to Guise I on a given attitudinal dimension minus the mean score assigned to Guise III on that dimension. Mean attitude difference scores and standard deviations for all five dimensions according to school, sex, and ethnicity were presented in Table 4. One-way analysis of variance of attitude difference scores by school, sex, and ethnicity showed that none of those variables was a significant source of variance in difference scores on any of the five attitude dimensions investigated. (Details of nonsignificant analysis of variance are not reported in this memorandum.)

Pupil Attitudes

Means and standard deviations of pupils' responses to the matched guise test are summarized in Table 5. The reader will recall that the pupil test differed from the one administered to the teachers by slightly different wording, and by the inclusion of a second acceptability measure, which replaced the judgment concerning the degree of education attained by the speaker in the teachers' test (see Appendix B). The second acceptability measure (Acceptability² in Table 5) consisted in the pupil's identifying the guises as using either "street," "playground," "church," or "school" talk, and, like achievement, preference, and standardness, was scored on a scale from 1 to 4 corresponding to an ascending degree of formality.

TABLE 4
Mean Attitude Difference Scores (Guise I - Guise III) by School, Sex, and Ethnicity,
for All Teachers (N = 37) Based on Attitude Pretests

Education													
Ravenswood (N=13)		Harlem (N=12)		Dayton (N=11)		Male (N=6)		Female (N=30)		Black (N=20)		Non-black (N=15)	
Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
1.30	0.80	0.97	0.75	1.21	0.62	1.29	0.70	1.14	0.74	1.19	0.84	1.13	0.58

Acceptability													
Ravenswood (N=12)		Harlem (N=12)		Dayton (N=11)		Male (N=5)		Female (N=30)		Black (N=20)		Non-black (N=15)	
Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
2.65	1.73	2.85	2.45	3.01	2.39	3.15	2.07	2.78	2.21	2.96	2.00	2.65	2.42

Achievement													
Ravenswood (N=10)		Harlem (N=10)		Dayton (N=11)		Male (N=4)		Female (N=27)		Black (N=18)		Non-black (N=13)	
Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
0.96	0.66	1.11	0.80	1.20	0.64	1.36	0.32	1.05	0.71	0.03	0.74	1.17	0.61

continued

TABLE 4 (Continued)

		Preference					
		Harlem (N=12)		Dayton (N=11)		Male (N=6)	
Ravenswood (N=13)		Mean	S.D.	Mean	S.D.	Mean	S.D.
0.43	0.53	0.44	0.58	0.57	0.43	0.54	0.64
						Female (N=30)	
						Mean	S.D.
						0.46	0.57
						Black (N=20)	
						Mean	S.D.
						0.57	0.63
						Non-black (N=16)	
						Mean	S.D.
						0.36	0.48

		Standardness					
		Harlem (N=12)		Dayton (N=11)		Male (N=6)	
Ravenswood (N=13)		Mean	S.D.	Mean	S.D.	Mean	S.D.
1.42	0.80	1.01	0.90	1.45	0.58	1.17	1.07
						Female (N=30)	
						Mean	S.D.
						1.67	0.73
						Black (N=20)	
						Mean	S.D.
						1.08	0.80
						Non-black (N=15)	
						Mean	S.D.
						1.29	0.77

Note: School, sex, and ethnicity were not significant sources of variance for any attitudinal dimension.

TABLE 5
Means and Standard Deviations of Pupils' Speech Varieties Attitude Judgments

	Acceptability ²		Acceptability ¹		Achievement		Preference		Standardness	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
Ravenswood (N = 305)										
Guise I	7.39	3.79	16.74	8.56	9.56	4.77	9.03	4.72	9.10	4.84
Guise II	6.70	3.60	16.01	8.44	9.09	4.46	8.72	4.50	8.70	4.51
Guise III	6.87	3.80	15.96	8.47	9.00	4.53	8.75	4.54	8.73	4.66
Harlem (N = 120)										
Guise I	8.56	4.33	16.97	8.07	10.70	4.31	10.17	4.22	10.49	4.34
Guise II	7.09	3.74	15.81	7.84	9.51	4.26	9.28	4.19	9.44	4.23
Guise III	7.01	3.81	15.67	7.93	9.61	4.18	9.37	4.10	9.23	4.29

Difference between means = $p < .05$ is indicated by a single line.

Difference between means = $p < .01$ is indicated by a double line.

For summary of t-tests for significant differences between means, see Appendix F.

In neither of the research sites in which pupil attitudes were measured did the pupils make any significant distinctions between Guises II and III. The down-grading of both vernacular guises, however, was definitely more pronounced in Harlem, where the pattern of I over II and III applies to all attitudinal dimensions ($p < .01$). The Ravenswood children did not differentiate between SBE and vernacular guises in the same way. On one of the acceptability measures and the preference measure they made no significant distinction at all among the three guises. Since one of the acceptability measures and the likelihood-of-achievement measure do follow the "I over II and III" pattern, however, lack of ability to differentiate the guises cannot account for the absence of significant differentiation on the first acceptability measure and on preference. The cause of the difference between the Ravenswood and Harlem results must therefore be linked to a real attitudinal difference that is probably associated with differences between the two communities.

It should be noted that the Harlem teachers did not share their pupils' preference judgments. But as far as the crucial dimension of likelihood of achievement in school is concerned, pupils in both Harlem and Ravenswood share each other's and their teachers' judgment. The SBE speaker is more likely to succeed than the speaker of VBE.

Just as in the analysis of teacher attitudes, attitude difference scores for each dimension were also computed for individual pupils by subtracting the average of the scores on Guise III from the average score on Guise I. For both Ravenswood and Harlem, the difference scores associated with each attitude dimension were analyzed according to sex and grade level (see Table 6). For Ravenswood, grade and sex contributed significantly to the variance in the acceptability difference scores. The variance in attitude difference score on Acceptability² due to grade shows no definite trend. The difference score associated with Acceptability¹ does show a definite increase between grade 4 and grades 5 and 6. Between grades 4 and 5, the Ravenswood children are evidently becoming aware of the acceptability pattern that excludes vernacular speech on more formal occasions. It will also be

TABLE 6
Mean Pupil Attitude Difference Scores (Guise I - Guise III) by Grade Level and Sex
Ravenswood

Acceptability ²									
GRADE LEVEL* (N=301)					SEX** (N=299)				
Grade 4 (N=37)		Grade 5 (N=167)		Grade 6 (N=97)	Male (N=152)		Female (N=147)		
Mean	S.D.	Mean	S.D.	Mean	Mean	S.D.	Mean	S.D.	
0.40	0.86	0.34	0.79	0.43	0.20	0.76	0.47	0.82	
Acceptability ¹									
GRADE LEVEL* (N=302)					SEX + (N=300)				
Grade 4 (N=36)		Grade 5 (N=167)		Grade 6 (N=99)	Male (N=152)		Female (N=148)		
Mean	S.D.	Mean	S.D.	Mean	Mean	S.D.	Mean	S.D.	
-0.27	1.35	0.41	1.47	0.36	0.17	1.31	0.47	1.54	
Achievement									
GRADE LEVEL** (N=301)					SEX (N=299)				
Grade 4 (N=36)		Grade 5 (N=166)		Grade 6 (N=99)	Male (N=152)		Female (N=147)		
Mean	S.D.	Mean	S.D.	Mean	Mean	S.D.	Mean	S.D.	
-0.15	0.61	0.27	0.75	0.35	0.21	0.75	0.30	0.78	

continued

TABLE 6 (Continued)

GRADE LEVEL (N=310)				<u>Preference</u>		SEX (N=299)			
Grade 4 (N=36)		Grade 5 (N=165)		Grade 6 (N=99)		Male (N=152)		Female (N=147)	
Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
0.14	0.54	0.18	0.83	0.12	0.57	0.16	0.65	0.15	0.79

GRADE LEVEL (N=302)				<u>Standardness</u>		SEX (N=300)			
Grade 4 (N=37)		Grade 5 (N=166)		Grade 6 (N=99)		Male (N=153)		Female (N=147)	
Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
0.31	0.89	0.23	0.82	0.30	0.70	0.27	0.59	0.27	0.09

continued

TABLE 6 (Continued)

Harlem

<u>Acceptability</u> ²							
GRADE LEVEL (N=119)				SEX (N=120)			
Grade 4 (N=81)		Grade 5 (N=38)		Male (N=60)		Female (N=60)	
Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
0.22	0.61	0.17	0.86	0.14	0.79	0.27	0.57
<u>Acceptability</u> ¹							
GRADE LEVEL (N=119)				SEX (N=120)			
Grade 4 (N=81)		Grade 5 (N=38)		Male (N=60)		Female (N=60)	
Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
0.44	1.51	1.14	1.70	0.77	1.67	0.55	1.54
<u>Achievement</u>							
GRADE LEVEL** (N=119)				SEX (N=120)			
Grade 4 (N=81)		Grade 5 (N=38)		Male (N=60)		Female (N=60)	
Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
0.09	0.79	0.64	0.77	0.29	0.83	0.21	0.81

continued

continued

noted that on both acceptability measures, girls make a significantly greater distinction between Guises I and III than do boys. In other words, the acceptability measure shows girls to be less accepting of vernacular usage than boys.

Grade level also affects the achievement dimension difference score significantly. As the pupils progress from grade 4 to grade 6, they become increasingly aware of the difference between SBE and VBE (see Appendix D for scores on the Discrimination Test) and learn to associate vernacular speech with diminished likelihood of educational success.

The pattern of significant variances in the Harlem difference scores shows some similarity to the one in Ravenswood. There is an increase in the attitude difference score on Acceptability¹ from grade 4 to grade 5 (i.e., vernacular becomes relatively less acceptable). And there is also a corresponding significant increase in the difference scores on the likelihood-to-achieve dimension. The Harlem pupils, just like their Ravenswood peers, learn to associate vernacular speech with greater likelihood of educational failure as they proceed through the school system. In Harlem, difference scores on preference and standardness also became significantly larger in the step from grade 4 to grade 5. This increase evidently reflects a purely attitudinal judgment (Discrimination Test scores do not increase significantly from grade 4 to grade 5). It also constitutes a striking difference from Ravenswood, where (in spite of a significant increase in Discrimination Test scores from grade 5 to grade 6) preference and standardness difference scores are not affected by grade level. This difference between Harlem and Ravenswood is, of course, reflected also in the already noted absence of a matched guise effect concerning preference and standardness among the Ravenswood pupils.

Teacher Attitudes and Pupil Achievement

Ravenswood

For the purpose of establishing relationships between pupil achievement and teacher attitude, the latter was expressed by the

attitude difference scores (Guise I - Guise III) and the former by grades in reading, relative gain scores in reading, and scores on the Black English Discrimination and Production Tests.

The difference scores of each teacher on the five attitudinal dimensions and the achievement scores of each teacher's class (mean pupil scores) are reported in Table 7. The correlations between teacher attitude difference scores and pupil achievement measures are shown in Table 8. The nature of the correlational relationship is as follows: (1) The teachers' attitudes seem to have a consistent, though not significant, negative relation to the pupils' grades in the sense that the magnitude of the teachers' downgrading of vernacular speech tends to be associated with lower mean reading grades. However, none of the negative correlations between teacher attitude difference scores and the average of the grades assigned by the teachers reaches significance. (2) There are strong and significant relationships between the teachers' attitude difference scores on acceptability, achievement, and preference and the pupils' ability to distinguish SBE from VBE as measured by the Discrimination Test. In other words, teachers who discriminate attitudinally between the SBE and VBE speech varieties apparently teach their pupils to discriminate cognitively. (3) There appears to be no relation of teacher attitudes to relative reading gains.

Harlem

Teacher attitude scores, mean pupil achievement scores for each teacher's class, and the correlations between them are shown in Tables 9 and 10. The results of the correlation analysis were as follows: (1) Only one of the teacher attitude difference scores--standardness--correlates positively and significantly with the pupils' ability to distinguish SBE and VBE. (2) The same standardness difference score also correlates significantly with the class (mean pupil) grades. (3) For fourth grade there is a positive correlation between the teacher attitude difference score on the achievement dimension and pupil relative gains in reading (no fifth-grade gain scores were available).

TABLE 7

Teacher Attitude Difference Scores and Mean Pupil Achievement Scores:
Ravenswood

Teacher	Difference Scores*					Reading Grade			Relative Reading Gains			Discrimination Test		
	1	2	3	4	5	N	Mean	S.D.	N	Mean	S.D.	N	Mean	S.D.
1	2.00	4.00	--	0.25	2.75	17	2.35	1.12	10	0.55	0.67	23	16.70	3.33
2	1.00	0.50	--	0.25	1.83	25	2.32	0.95	22	0.08	0.76	26	19.00	3.31
3	1.75	2.35	1.25	0.25	1.75	19	2.05	0.71	21	-0.30	0.68	16	18.44	3.41
4	1.50	3.75	1.00	1.25	0.00	24	2.58	1.02	18	0.84	1.09	21	19.86	4.74
5	1.75	3.00	1.75	0.75	1.00	22	2.09	1.19	16	0.69	0.70	19	16.26	2.49
6	1.75	1.50	1.00	0.00	2.00	13	2.77	1.09	13	-0.03	0.93	20	18.05	3.96
7	0.00	--	--	0.25	0.00	19	2.42	0.61	16	-0.08	0.67	22	23.05	3.98
8	2.25	5.25	2.00	2.00	2.00	19	2.37	0.76	16	-0.18	0.56	20	17.95	3.05
9	1.75	2.25	0.25	0.00	0.75	21	2.67	0.65	20	-0.67	0.45	27	17.89	3.73
10	1.33	0.83	1.33	0.33	1.33	27	3.00	0.68	23	0.05	0.51	22	15.18	1.99
11	0.00	0.50	0.00	0.00	1.50	27	2.67	0.83	20	-0.25	0.41	25	16.80	4.04
12	1.75	3.50	0.75	1.25	2.00	27	2.19	0.08	19	-0.36	0.43	21	19.71	3.94
13	0.00	4.00	0.25	0.00	1.50	21	2.86	0.79	16	0.01	0.63	--	--	--

Note: The possible range of difference scores for dimensions 1, 3, 4, and 5 was 0 to ± 3 . The possible range for dimension 2 was 0 to ± 7 .

* Attitude dimension code:

- 1 = Education
- 2 = Acceptability
- 3 = Achievement
- 4 = Preference
- 5 = Standardness

TABLE 8
Correlations between Teacher Attitude Difference Scores and
Mean Pupil Achievement Scores:
Ravenswood

Attitude Dimension	Relative Reading Gains	Grade in Reading	Discrimination Test
Education	.31 (N = 13)	-.37 (N = 13)	.37 (N = 11)
Acceptability	.15 (N = 12)	-.33 (N = 12)	.77** (N = 11)
Achievement	.40 (N = 10)	-.44 (N = 10)	.67* (N = 9)
Preference	.24 (N = 13)	-.30 (N = 13)	.58* (N = 11)
Standardness	.10 (N = 13)	-.16 (N = 13)	-.01 (N = 15)

* $p < .05$

** $p < .01$

TABLE 9
Teacher Attitude Difference Scores and Mean Pupil Achievement Scores:
Harlem

Teacher	Difference Scores*					Reading Grade			Relative Reading Gains			Discrimination Test		
	1	2	3	4	5									
						Pupil N	Mean	S.D.	Pupil N	Mean	S.D.	Pupil N	Mean	S.D.
1	1.17	0.00	1.33	0.58	1.17	4	3.25	0.50	4	0.07	0.35	3	19.00	1.73
2	1.50	5.50	1.50	0.75	2.00		--	--		--	--	15	20.20	4.18
3	1.25	5.25	1.50	0.75	1.75		--	--		--	--		--	--
4	0.00	1.25	0.75	0.25	0.23	12	1.58	0.90	12	0.08	0.60	2	20.00	1.86
5	2.00	2.92	2.00	0.75	2.25	9	2.67	0.87	9	0.24	0.61	8	27.13	4.81
6	1.92	6.00	--	0.00	0.00	16	2.31	0.79	16	0.11	0.47	22	17.38	2.82
7	0.75	6.50	1.25	0.75	1.25	6	3.00	0.63	6	-0.19	0.70	6	14.50	2.88
8	0.08	0.50	-0.50	0.00	0.00		--	--		--	--	15	18.93	3.94
9	0.00	0.00	--	0.00	0.00		--	--		--	--	7	17.29	5.35
10	1.00	1.25	1.50	0.25	1.75		3.36	0.67	11	0.21	1.28	11	19.91	3.94
11	0.25	1.00	0.00	-0.50	0.00	13	2.46	0.52	13	-0.41	0.41	13	15.23	2.20
12	1.75	4.00	1.75	1.75	1.75	5	2.80	0.45	5	-0.17	0.24	5	16.80	5.63

Note: The possible range of difference scores for dimensions 1, 3, 4, and 5 was 0 to + 3. The possible range for dimension 2 was 0 to + 7.

* Attitude dimension code:

- 1 = Education
- 2 = Acceptability
- 3 = Achievement
- 4 = Preference
- 5 = Standardness

TABLE 10

Correlations between Teacher Attitude Difference Scores and
Mean Pupil Achievement Scores: Harlem

Attitude Dimension	Relative Reading Gains		Grade in Reading		Discrimination Test	
Education	.43	(N=8)	.34	(N=8)	.38	(N=11)
Acceptability	-.11	(N=8)	-.04	(N=8)	-.15	(N=11)
Achievement	.66*	(N=7)	.46	(N=7)	.41	(N= 9)
Preference	.09	(N=8)	.29	(N=8)	.16	(N= 9)
Standardness	.40	(N=8)	.63*	(N=8)	.51*	(N=11)

* $p < .05$

No easily explainable overall pattern emerges from these relationships. The positive correlation between teacher attitude difference scores on standardness and mean scores on the Discrimination Test follows the Ravenswood pattern (i.e., greater awareness of the contrast between Guises I and III on the part of the teacher leads to greater awareness on the part of the pupils). But the associations of greater teacher awareness of standardness with higher pupil grades and of a greater attitude difference score on likelihood of achievement with relative reading gains are puzzling and may very well be isolated, accidentally significant correlations.

Pupil Attitudes and Pupil Achievement

Ravenswood

Pupils' attitude difference scores on all dimensions were utilized in the investigation of the relation of pupil attitude to achievement. Table 11 shows the mean attitude difference scores and achievement measures; Table 12 shows the correlations between them for the Ravenswood sample.

TABLE 11

Means and Standard Deviations of Pupil Attitude Difference Scores and Achievement Measures: Ravenswood

Attitude Dimension	Difference Scores			Achievement Measures		
	N	Mean	S.D.	N	Mean	S.D.
Acceptability ²	301	0.33	0.80	VBE Production	47 5.89	2.82
Acceptability ¹	302	0.31	1.44	SBE Production	47 10.17	2.45
Achievement	301	0.25	0.76	Grade	281 2.49	0.91
Preference	300	0.15	0.72	Relative Reading Gains	229 0.00	0.77
Standardness	302	0.26	0.79	Discrimination	262 18.28	4.02

TABLE 12

Correlation of Pupil Attitude Difference Scores and Achievement Measures: Ravenswood

Attitude Dimension	VBE Production (N=47)	SBE Production (N=47)	Grade (N=281)	Relative Reading Gains (N=229)	Discrimination Test (N=262)
Acceptability ²	.05	.03	.09	.05	.28**
Acceptability ¹	-.09	.25	.10	.10	.08
Achievement	.05	-.15	.04	.01	.27**
Preference	.05	.22+	.04	.09	.34**
Standardness	-.12	.05	.15	-.04	.30**

** P < .01

+ p = .06

Differences between attitudes toward Guises I and III are most pronounced on the dimension of Acceptability¹ and least pronounced on preference. Nevertheless, the measure of preference for Guise I over Guise III shows an expected and near-significant relation ($r = .22$, $p = .06$) to performance on the SBE Production Test. In other words, those who speak SBE better, as measured by the Production Test, also tend to prefer it. Of the other achievement measures used, only performance on the Discrimination Test is significantly, and positively, related to the attitude difference scores. Since the ability to distinguish between SBE and VBE is implied in the assignment of differential values to Guises I and III, the correlation between attitude difference scores and cognitive discrimination scores is not surprising.

Ravenswood pupils' attitudes had no significant relation to their grades, relative reading gains, or VBE production.

Harlem

Mean attitude difference scores and mean achievement scores for Harlem pupils are shown in Table 13; Table 14 shows the correlations between them. Just as in Ravenswood, scores on some of the attitude dimensions (acceptability and achievement) are strong predictors of ability to distinguish SBE and VBE. But for Harlem pupils there are also relations between attitude difference scores and other achievement measures. For the Production Test the relationships are in the expected direction: the greater the difference in attitudes (i.e., the higher Guise I is rated over Guise III) on dimensions other than acceptability, the better the student's production of SBE and the worse his production of VBE. In addition, the second acceptability judgment and the achievement judgment are correlated significantly with grade; and the score on Acceptability² is positively correlated with the pupils' relative gain scores in reading. In other words, whereas Ravenswood pupils' attitudinal judgments are clearly related only to the ability to discriminate between SBE and VBE speech, in Harlem these judgments also relate to better performance in SBE, to better grades, and even, according to one indication, to higher relative gain scores in reading.

TABLE 13

Means and Standard Deviations of Pupil Attitude Difference Scores
and Achievement Measures: Harlem

Attitude Dimension	Difference Scores			Achievement Measures			
	N	Mean	S.D.		N	Mean	S.D.
Acceptability ²	120	0.20	0.69	VBE Production	37	4.70	3.70
Acceptability ¹	119	0.66	1.60	SBE Production	37	12.05	3.70
Achievement	119	0.26	0.32	Reading Grade	76	2.55	0.89
Preference	118	0.19	0.77	Relative Reading Gains	76	0.00	0.69
Standardness	119	0.23	0.84	Discrimination	117	18.73	4.38

TABLE 14

Correlation of Individual Pupil Attitude Difference Scores
and Achievement Measures: Harlem

Attitude Dimension	VBE Production (N=37)	SBE Production (N=37)	Reading Grade (N=76)	Discrimina- tion Test (N=117)	Relative Reading Gains (N=76)
Acceptability ²	.04	.25	.24	.13+	.19*
Acceptability ¹	-.28	.21	.05	.23**	-.12
Achievement	-.49***	.51***	.21*	.25**	.11
Preference	-.32*	.26*	.07	.08	-.07
Standardness	-.37*	.39**	.14	.10	-.03

* p = .07

* p < .05

** p < .01

*** p < .001

Teacher Attitudes and Pupil Attitudes

The data concerning attitudes were also analyzed in order to determine to what extent the attitudes of teachers may influence the attitudes of pupils. The mean attitude difference scores of the pupils in each teacher's class were calculated (Table 15); correlations were obtained between the attitude difference scores of individual teachers and the mean attitude difference scores of their classes (Table 16).

The results of the correlational analysis can be summarized as follows. (1) Of all the teacher attitudes, only the judgment on the achievement dimension--evidently the one that is most relevant in the school context--has a significant correlation with pupil attitudes, and it appears to influence pupil attitudes on most dimensions. (2) The correlations between teacher attitude and pupil attitude on achievement, preference, and standardness are positive at Ravenswood and negative in Harlem. In other words, pupils at Ravenswood tend to develop their attitudes toward Black English in the same direction as their teachers; pupils in Harlem develop attitudes in the opposite direction from their teachers.

Within our sample the ethnicity of the teacher seems to have no bearing on attitudes toward languages. Teacher attitudes do not vary significantly according to either ethnicity (Table 4) or school settings (Tables 1, 2, and 4). Besides, Table 17 indicates that for the Ravenswood and Harlem sites no strikingly different patterns emerge from a comparison of the correlations between teacher attitude difference scores on the achievement dimension and pupil attitude difference scores, if the correlations are considered according to the ethnicity of the teachers.

Conclusions

The main conclusions of this study can be summarized as follows:

1. Teachers and pupils tend to agree in their attitudes toward Black speech varieties on certain crucial attitude dimensions,

TABLE 15
Teacher Attitude Difference Scores on Achievement^a and Mean Pupil Attitude Difference Scores
on All Dimensions

Ravenswood										Harlem									
Teacher		Tchr Ach	Pupil						Teacher	Tchr Ach	Pupil								
			Acc ²	Acc ⁱ	Ach	Pref	Stand	Acc ²			Acc ¹	Ach	Pref	Stand					
1	--	0.44	0.87	0.83	0.33	0.39	0.31	0.25	0.75	0.00	0.21								
2	--	0.07	-0.69	-0.13	-0.10	-0.02	-0.05	0.21	0.48	0.30	0.27								
3	1.25	0.22	0.53	0.13	0.19	0.29	--	--	--	--	--								
4	1.00	-0.01	0.12	0.13	-0.18	0.02	-0.08	0.56	0.55	0.03	-0.02								
5	1.75	0.29	0.34	0.33	0.40	0.25	0.50	0.33	1.37	0.27	0.25								
6	1.00	0.10	-0.01	0.20	0.27	0.27	0.39	0.17	0.10	0.15	0.18								
7	--	0.27	0.18	0.35	0.04	0.23	-0.07	-0.08	0.24	-0.10	-0.46								
8	2.00	1.43	1.14	1.55	1.02	0.83	0.36	1.29	2.28	1.06	1.21								
9	0.25	0.21	0.13	0.09	0.13	0.18	0.32	0.51	0.23	0.31	0.38								
10	1.33	0.78	0.09	0.72	0.25	0.49	0.30	0.55	0.47	0.30	0.27								
11	0.00	0.25	0.12	-0.15	0.13	-0.24	0.08	0.26	0.62	0.06	0.06								
12	0.75	-0.10	-0.15	-0.09	0.05	-0.07	0.10	0.20	-0.60	0.00	-0.10								
13	0.25	0.47	0.49	0.27	0.41	0.66													

^aBecause the teacher attitude difference score in the achievement dimension was the only teacher attitude measure that was significantly correlated with mean pupil (class) attitude difference scores (see Table 16), it is also the only teacher attitude measure reported in this table.

TABLE 16

Correlation between Teacher Attitude Difference Scores and
Mean Pupil Attitude Difference Scores

Ravenswood

Mean Pupil Scores	Teacher Difference Scores				
	Educ (N=6)	Acc (N=8)	Ach (N=9)	Pref (N=11)	Stand (N=9)
Acceptability ²	-.60	-.02	.49	.39	.17
Acceptability ¹	-.10	.42	.57*	.23	.19
Achievement	.44	.43	.70*	.42	.15
Preference	-.14	-.03	.56*	.37	.40
Standardness	.01	.48	.48	.18	.14

Harlem

Mean Pupil Scores	Teacher Difference Scores				
	Educ (N=6)	Acc (N=6)	Ach (N=7)	Pref (N=8)	Stand (N=8)
Acceptability ²	.63	-.63	-.38	-.06	.24
Acceptability ¹	-.24	-.73	-.67*	-.43	-.50
Achievement	-.01	-.52	-.84**	-.56	-.37
Preference	.54	-.44	-.60*	-.32	-.25
Standardness	0.36	-.56	-.63*	-.37	-.28

* p < .05
** p < .01

TABLE 17

Correlations between Teacher Attitude Difference Scores on Achievement and Mean Pupil Attitude Difference Scores, by Ethnicity of Teachers (Ravenswood and Harlem Combined)

Teacher Attitudes on Achievement	Pupil Attitudes				
	Acc ²	Acc ¹	Achievement	Pref	Standardness
Black teachers' attitudes (N=10)	0.32	-0.03	-0.24	-0.12	-0.21
White teachers' attitudes (N=6)	0.28	0.19	-0.50	0.53	0.19

such as the greater likelihood of the SBE speaker's success in school. On other dimensions (e.g., preference, acceptability) there appear to be differences (not statistically significant) between teachers and pupils as well as among research sites.

2. Exposure to new information in the workshops appears to have had no significant effect on apparently well-established attitudinal characteristics.
3. Teacher attitudes had little documentable effect on actual reading gains made by the pupil but appear to have had some relation to the grades assigned by the teachers. Teacher differential attitudes toward SBE and VBE also affected the pupils' cognitive awareness of the distinction between SBE and VBE speech.
4. The magnitude of the pupil attitudinal difference scores between SBE and VBE is positively related to the ability to distinguish between these speech varieties and--in one of the research sites--to productive ability in SBE and to grades.
5. Teacher attitudes on the likelihood-to-achieve dimension had a definite impact on the language attitudes of the pupils. The direction of that impact appears to have been influenced by the environment and context in which it occurred.

The overall conclusion concerning future research directions that suggests itself from this investigation is the following. Teacher

attitudes do have an impact on pupils--on their achievement and perhaps most directly on their attitudes, but the exact nature of that impact is probably influenced by many factors, of which teacher attitudes and their effects are only two. As has been suggested in a recent study (Dusek, 1975), a finer analysis of just how teacher attitudes make their impact may be the next and possibly more promising avenue for research.

REFERENCES

- Alpert, J. L. "Teacher Behavior and Pupil Performance: Reconsideration of the Mediation of the Pygmalion Effect." The Journal of Educational Research, 69 (1975), 53-57.
- Bartley, D. E., and Politzer, R. L. Practice-Centered Teacher Training: Standard English for Speakers of Nonstandard Dialects. Philadelphia: The Center for Curriculum Development, 1972.
- Dalby, D. "The African Element in American English." In T. Kochman, ed., Rappin' and Stylin' Out. Urbana: University of Illinois Press, 1972. Pp. 177-186.
- Dusek, J. "Do Teachers Bias Children's Learning?" Review of Educational Research, 45 (Fall 1975), 661-684.
- Fasold, R. "Sloppy Speech in Standard English." Paper presented at the Fourth Triennial Conference on Symbolic Processes, Washington, D. C., April 1972.
- Lambert, W. F., Frankel, H., and Tucker, G. "Judging Personality through Speech: A French Canadian Example." Journal of Communication, 26 (1966), 305-321.
- Program on Teaching and Linguistic Pluralism, Stanford Center for Research and Development in Teaching. "SCRDT Black English Speech Varieties Attitude Test." Stanford, Ca.: Stanford Center for Research and Development in Teaching, in preparation.
- Program on Teaching and Linguistic Pluralism, Stanford Center for Research and Development in Teaching. "SCRDT Student Black English Tests." Stanford, Ca.: Stanford Center for Research and Development in Teaching, in preparation.
- Program on Teaching and Linguistic Pluralism, Stanford Center for Research and Development in Teaching. "SCRDT Teacher Black English Tests." Stanford, Ca.: Stanford Center for Research and Development in Teaching, in preparation.
- Rosenthal, R., and Jacobsen, L. Pygmalion in the Classroom. New York: Holt, Rinehart, and Winston, 1968.
- Seligman, G. P., Tucker, G. R., and Lambert, W. E. "The Effects of Speech Style and Other Attributes in Teachers' Attitudes toward Pupils." Language and Society, 1 (1972), 131-142.
- Shuy, R. W., and Fasold, R. W., eds. Language Attitudes: Current Trends and Prospects. Washington, D. C.: Georgetown University Press, 1973.

Taylor, O. "Response to Social Dialects and the Field of Speech." In R. W. Shuy, ed., Sociolinguistics: A Crossdisciplinary Perspective. Washington, D. C.: Center for Applied Linguistics, 1971.

Vaughn-Cooke, A. "The Black Preaching Style." Languages and Linguistics Working Papers, No. 5, ed. by W. Riley and D. Smith. Washington, D. C.: Georgetown University Press, 1972. Pp. 28-29.

Appendix A

SAMPLE SCRIPTS FOR SPEECH VARIETIES ATTITUDE TEST

Four one-paragraph stories were recorded. The speaker recorded the same story three times, altering the grammatical and phonological features each time to produce three different guises, as shown below.

Guise I:

Sharon King has to cook and iron and keep house and she almost never gets to go out and play anything. Sometimes when she gets tired, she tries to get through in a hurry or she asks her little sister to help her. And sometimes she just gets mad. But no matter what Sharon does, she still has to work and can't play. That's why Sharon frowns so much. Nobody wants to do all that.

Guise II:

Sharon King have to cook and iron and keep house and almost never get to go out and play anything. Sometimes when she get tired, she try to get through in a hurry, or she ask her little sister to help her. And sometime she just get mad. But no matter what Sharon do, she still has to work and can't play and that's why Sharon frown so much. Nobody wanna do all that.

Guise III:

Sharon King have to cook and iron and keep house and she don't hardly never get to go out and play nothing. Sometimes when she get tired, she try to get through in a hurry, or she ask her little sister to help her. And sometimes she just get mad. But no matter what Sharon do, she still have to work and can't play. That's why Sharon frown so much. Don't nobody wanna do all that.

Appendix B

PUPILS' RESPONSE SHEET FOR SPEECH VARIETIES ATTITUDE TEST

Instructions: Listen to the directions given on the tape.

1. Name _____
First Last
2. Teacher's name _____
3. Sex: Male _____ Female _____
4. Place of birth: _____
5. School _____
6. Grade: 4 _____ 5 _____ 6 _____
7. Age: 9 _____ 10 _____ 11 _____ 12 _____ 13 _____

Instructions: Choose the best answer for each of the following questions. Place an (x) by your best choice. (See below.)

Acceptability^{2*}

1. This speech is best called (check the space which you think is the best place for this speech):

Street _____ Playground _____ School program _____ Church program _____
talk talk talk talk

2. Another name for this speech is _____

Acceptability^{1*}

3. This speech should be spoken (choose one):

On a _____ On a _____ Eating at _____ On the _____ Playing _____ Playing _____
school church Thanksgiving playground in the in the
program program dinner at school living room streets

No place _____ Any place _____

Achievement*

4. A person who speaks like this is (choose one):

At the top of _____ Near the top of _____ Near the bottom of _____ At the bottom _____
his class his class his class of his class

Preference*

5. Do you like this speech? (check one):

Like very much _____ Like OK _____ Not so good _____ Don't like _____

Standardness*

6. Is this voice speaking good English? (check one):

Yes, very much so _____ Sort of _____ Not much _____ No _____

7. Ethnic background: Black____ Mexican-American____
Asian-American____ Caucasian____ Other____

8. Title 1 yes____ no____

* The labels identifying the attitudinal dimensions were not printed on the actual answer sheets used.

Each pupil filled out one of these sheets for each passage on the tape, for a total of 12.

TEACHERS' RESPONSE SHEET FOR SPEECH VARIETIES ATTITUDE TEST

Education*

1. This speech is best called:

Very
Educated

Slightly
Educated

Slightly
Uneducated

Very
Uneducated

2. Some good names for this speech are: (Check as many names as are applicable; put two checks (✓) next to your favorite.)

School talk____ Formal English____ Standard English____
 Bad English____ Black English____ Play talk____ Home talk____
 Country English____ TV English____ White English____ Street talk____
 Informal English____ Church talk____ Proper English____ Playground____
 Good English____ Africanized English____ Flat English____ talk____
 Everyday talk____ Natural English____ Ghetto English____
 Vernacular Black English____
 Other (please write in) _____

Acceptability*

3. This speech is appropriate for:

1	2	3	4	5	6
On a school program	On a church program	Eating at Thanksgiving dinner	On the play- ground at school	Playing in the living room	Playing in the streets
7	8				
No place	Any place				

Achievement*

4. The speaker is a

Very good
achiever

Slightly good
achiever

Slightly poor
achiever

Very poor
achiever

Preference*

5. Do you like this voice?

Like
strongly

Like
mildly

Dislike
mildly

Dislike
strongly

Standardness*

6. This voice is

Very
standard

Slightly
standard

Slightly
nonstandard

Very
nonstandard

*The labels identifying the attitudinal dimensions were not printed on the actual answer sheets.

Each teacher completed one of these sheets for each passage on the tape, for a total of 12.

Appendix C

REGRESSION OF 1975 READING SCORES OVER 1974 READING SCORES

Ravenswood						
Dependent Variable: 1975 reading scores						
Variable entered on step 1: 1974 reading scores						
Multiple R	0.63	ANOVA	df	SS	MS	F
R Square	0.40	Regression	1	410354.17	410354.17	152.24
Adj. R. Square	0.40	Residual	227	611077.48	2694.50	
Standard Error 51.92						
Variables in the Equation						
Variable	B	Beta	St. Error B		F	
1974 Reading	0.60	0.63	0.05		152.24	
(constant)	199.61					

Harlem						
Dependent Variable: 1975 reading scores						
Variables entered on step 1: 1974 reading scores						
Multiple R	0.73	ANOVA	df	SS	MS	F
R Square	0.53	Regression	1	4381.00	4381.00	82.69
Adj. R. Square	0.53	Residual	74	3920.08	52.98	
Standard Error 7.23						
Variables in the Equation						
Variable	B	Beta	St. Error B		F	
1974 Reading	4.82	0.73	0.53		82.69	
(constant)	15.26					

Appendix D

MEAN PUPIL ACHIEVEMENT SCORES BY GRADE LEVEL AND SEX

Ravenswood

SBE Production Test									
<u>Grade level</u>						<u>Sex</u>			
Grade 4 (N=5)	Grade 5 (N=23)	Grade 6 (N=18)	Male (N=23)	Female (N=22)					
Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
10.20	1.92	9.07	2.47	10.44	2.31	10.04	2.62	10.50	2.24
VBE Production Test									
<u>Grade level</u>						<u>Sex</u>			
Grade 4 (N=5)	Grade 5 (N=25)	Grade 6 (N=15)	Male (N=27)	Female (N=19)					
Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
5.20	3.83	5.84	2.38	6.13	3.40	6.33	2.92	5.16	2.63
Discrimination Test									
<u>Grade level*</u>						<u>Sex*</u>			
Grade 4 (N=31)	Grade 5 (N=134)	Grade 6 (N=90)	Male (N=140)	Female (N=109)					
Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
16.52	3.72	18.60	4.23	18.21	3.77	17.06	3.90	18.75	4.07
Grade									
<u>Grade level**</u>						<u>Sex*</u>			
Grade 4 (N=35)	Grade 5 (N=148)	Grade 6 (N=95)	Male (N=139)	Female (N=133)					
Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
2.31	0.93	2.35	0.91	2.78	0.84	2.40	0.87	2.63	0.93
Adjusted Gain Scores in Reading									
<u>Grade level</u>						<u>Sex</u>			
Grade 4 (N=24)	Grade 5 (N=27)	Grade 6 (N=76)	Male (N=110)	Female (N=110)					
Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
-0.31	0.48	-0.06	0.75	0.20	0.85	0.04	0.68	-0.04	0.98

* Significant source of variance: $p < .05$

** Significant source of variance: $p < .01$

Harlem

SBE Production Test							
<u>Grade level</u>				<u>Sex</u>			
Grade 4 (N=23)		Grade 5 (N=14)		Male (N=16)		Female (N=21)	
Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
11.35	3.38	13.21	4.04	12.38	4.11	11.81	3.44

VBE Production Test							
<u>Grade level*</u>				<u>Sex</u>			
Grade 4 (N=23)		Grade 5 (N=14)		Male (N=16)		Female (N=21)	
Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
5.45	3.79	3.50	3.35	3.13	3.78	5.91	3.24

Grade							
<u>Grade level</u>				<u>Sex</u>			
Grade 4 (N=76)				Male (N=38)		Female (N=38)	
Mean	S.D.			Mean	S.D.	Mean	S.D.
2.56	0.89			2.26	0.98	2.84	0.68

Discrimination Test							
<u>Grade level</u>				<u>Sex</u>			
Grade 4 (N=80)		Grade 5 (N=37)		Male (N=57)		Female (N=60)	
Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
18.54	4.41	19.14	4.33	19.07	4.62	18.40	4.15

Adjusted Gain Scores in Reading							
<u>Grade level</u>				<u>Sex</u>			
Grade 4 (N=76)				Male (N=38)		Female (N=38)	
Mean	S.D.			Mean	S.D.	Mean	S.D.
0.000	0.09			-0.007	0.54	0.007	0.32

* Significant source of variance: $p < .05$

Appendix E

SUMMARY OF RESULTS OF t-TESTS FOR SIGNIFICANT DIFFERENCES
BETWEEN GUISES (TEACHERS' ATTITUDES)

Attitude Dimension	Guises	Differences Between Means	t-Value	Degrees of Freedom	2-tail Proba- bility
Ravenswood (Pretest; N = 7)					
Education	I-II	3.71	3.71	6	0.010
	I-III	5.28	7.08	6	0.001
Acceptability	I-II	5.14	2.58	6	0.042
	I-III	6.86	2.63	6	0.049
Achievement	I-II	3.43	4.56	6	0.004
	I-III	4.57	10.67	6	0.001
Standardness	I-II	4.43	5.89	6	0.001
	I-III	5.57	6.41	6	0.001
Ravenswood (Posttest; N = 7)					
Education	II-III	3.71	3.74	6	0.010
Acceptability	I-II	5.14	3.39	6	0.015
	I-III	6.85	3.30	6	0.016
Achievement	I-II	3.00	3.67	6	0.010
	II-III	3.71	3.36	6	0.015
Standardness	I-II	4.00	3.14	6	0.20
	I-III	4.86	3.38	6	0.015
	II-III	0.85	2.52	6	0.045

Attitude Dimension	Guises	Differences Between Means	t-Value	Degrees of Freedom	2-tail Probability
Harlem (Pretest; N = 8)					
Education	I-III	4.25	7.60	7	0.001
Acceptability	I-II	6.75	2.96	7	0.021
	I-III	8.63	5.46	7	0.001
Achievement	I-II	2.75	2.67	7	0.032
	I-III	3.63	3.34	7	0.012
Standardness	I-II	5.37	5.38	7	0.001
	II-III	5.87	5.87	7	0.001
Harlem (Posttest; N = 8)					
Education	I-II	3.63	2.77	7	0.028
	I-III	4.00	2.99	7	0.020
Acceptability	I-II	6.88	2.75	7	0.028
	I-III	7.50	3.47	7	0.010
Achievement	I-II	2.75	3.27	7	0.014
	I-III	3.63	3.11	7	0.017
Standardness	I-II	4.13	5.22	7	0.001
	I-III	5.88	9.19	7	0.001
	II-III	1.75	2.97	7	0.021

Attitude Dimension	Guises	Differences Between Means	t-Value	Degrees of Freedom	2-tail Proba- bility
Dayton (Pretest; N = 11)					
Education	I-III	3.82	2.09	10	0.023
Acceptability	I-II	8.55	3.05	10	0.012
	I-III	9.00	2.63	10	0.025
Achievement	I-II	2.18	1.80	10	0.102
	I-III	3.18	3.34	10	0.007
Standardness	I-II	3.45	2.39	10	0.038
	I-III	3.73	2.90	10	0.016
Dayton (Posttest; N = 11)					
Education	I-II	4.91	5.08	10	0.001
	I-III	5.37	5.67	10	0.001
Acceptability	I-II	11.73	4.35	10	0.001
	I-III	12.55	4.59	10	0.001
Achievement	I-II	2.73	3.05	10	0.012
	I-III	3.45	3.30	10	0.008
Preference	I-II	2.73	3.12	10	0.011
	I-III	2.27	3.30	10	0.008
Standardness	I-II	4.45	3.97	10	0.003
	I-III	4.82	4.00	10	0.003

Appendix F

SUMMARY OF RESULTS OF t-TESTS FOR SIGNIFICANT DIFFERENCES
BETWEEN GUISES (PUPILS' ATTITUDES)

Attitude Dimension	Guises	Difference Between Means	t-Value	Degrees of Freedom	2-tail Proba- bility
Ravenswood (N = 305)					
Acceptability ²	I-II	0.69	2.93	134	0.004
	I-III	0.52	2.26	134	0.025
Education	I-III	0.56	2.65	134	0.009
Standardness	I-II	0.41	2.06	134	0.041
Harlem (N = 120)					
Acceptability ²	I-II	1.46	5.81	200	0.001
	I-III	1.55	6.50	200	0.001
Acceptability ¹	I-II	1.16	2.83	200	0.005
	I-III	1.30	3.19	200	0.002
Education	I-II	3.28	5.14	200	0.001
	I-III	1.09	4.64	200	0.001
Preference	I-II	0.90	3.81	200	0.001
	I-III	0.81	3.60	200	0.001
Standardness	I-II	1.05	4.52	200	0.001
	I-III	1.26	5.36	200	0.001

Appendix G

SUMMARY OF ONE-WAY ANALYSIS OF VARIANCE FOR SIGNIFICANT
INDEPENDENT VARIABLES AFFECTING PUPILS'
ATTITUDE DIFFERENCE SCORES

Ravenswood

Acceptability ²				
Source of Variance				
Grade level	SS	df	MS	F
Between groups	4.05	2	2.03	3.25*
Within groups	<u>186.01</u>	<u>298</u>	0.63	
Total	190.06	300		
Sex	SS	df	MS	F
Between groups	5.58	1	5.59	9.03*
Within groups	<u>183.67</u>	<u>297</u>	0.62	
Total	189.26	298		
Acceptability ¹				
Grade level	SS	df	MS	F
Between groups	14.02	2	7.01	3.41*
Within groups	<u>615.27</u>	<u>299</u>	2.06	
Total	629.29	301		
Sex	SS	df	MS	F
Between groups	6.71	1	6.71	3.22+
Within groups	<u>620.53</u>	<u>299</u>	2.06	
Total	627.24	299		
Achievement				
Grade level	SS	df	MS	F
Between groups	6.85	2	3.43	6.10**
Within groups	<u>167.50</u>	<u>298</u>	0.56	
Total	174.35	300		

Harlem

		Acceptability ²			
Source of Variance		SS	df	MS	F
Grade level					
	Between groups	12.86	1	12.86	5.18**
	Within groups	<u>290.81</u>	<u>117</u>		
	Total	303.68	118		

		Achievement			
Grade level		SS	df	MS	F
	Between groups	7.92	1	7.92	12.97**
	Within groups	<u>71.43</u>	<u>117</u>	0.61	
	Total	79.35	118		

		Preference			
Grade level		SS	df	MS	F
	Between groups	10.31	1	10.32	20.04**
	Within groups	<u>59.69</u>	<u>116</u>		
	Total	70.01	117		

		Standardness			
Grade level		SS	df	MS	F
	Between groups	13.07	1	13.07	21.49**
	Within groups	<u>71.14</u>	<u>117</u>		
	Total	84.21	118		

* p = < .05

** p = < .01

+ p = .07

Appendix H

SUMMARY OF ONE-WAY ANALYSIS OF VARIANCE FOR SIGNIFICANT INDEPENDENT
VARIABLES AFFECTING PUPILS' ACHIEVEMENT MEASURES

Ravenswood

		Grade			
Source of Variance		SS	df	MS	F
Grade level					
	Between groups	12.14	2	6.07	7.68
	Within groups	<u>217.33</u>	<u>275</u>	0.79	
	Total	229.47	277		
Sex					
	Between groups	3.55	1	3.55	4.44
	Within groups	<u>216.39</u>	<u>270</u>	0.80	
	Total	219.94	271		
		Discrimination Test			
Grade level		SS	df	MS	F
	Between groups	108.98	2	54.49	3.39*
	Within groups	<u>4055.02</u>	<u>252</u>	16.09	
	Total	4164.00	254		
Sex					
	Between groups	77.48	1	77.48	4.92*
	Within groups	<u>3893.02</u>	<u>247</u>	15.76	
	Total	3970.50	248		
		Relative Gain Scores in Reading			
Grade level		SS	df	MS	F
	Between groups	5.96	2	2.98	5.14
	Within groups	<u>129.93</u>	<u>224</u>	0.78	
	Total	155.89	226		

Harlem

VBE Production Test

Source of Variance		SS	df	MS	F
Sex	Between groups	70.17	1	20.17	5.80*
	Within groups	<u>423.56</u>	<u>35</u>	12.10	
	Total	493.73	36		

		Grade			
Sex		SS	df	MS	F
	Between groups	6.37	1	6.37	8.99
	Within groups	<u>52.42</u>	<u>74</u>		
	Total	58.79	75		

* p = < .05